OPERATION AND MAINTENANCE PLAN
FOR
WASTE TREATMENT LAGOON (AEROBIC)

Landowner/user: _____ Date: _____

Address: _____

A properly operated and maintained **Aerobic Waste Treatment Lagoon** is an asset to your property. This treatment lagoon was designed and installed to provide biological treatment for milkhouse effluent or veal calf waste. The estimated life span of this practice is at least 10 years. The life of the lagoon can be assured and usually increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation and maintenance to maintain satisfactory performance. The following are some requirements to help you develop a good operation and maintenance program.

Operation and Maintenance

1. Before use, fill the lagoon with clean water to the minimum design depth which is two feet.

2. Maintain a gage post which shows maximum and minimum operating levels. When the liquid level reaches the maximum level, the depth should be lowered to a normal level by hauling or irrigation. Liquid should be applied in accordance to the nutrient management plan. When the lagoon liquid level drops below the minimum, additional water should be added by pumping or diverting runoff water into the lagoon. The liquid level must never drop below the two foot level.

Inspection and Maintenance

1. Divert surface water away from the lagoon. Check the channels and berms of the clean water diversions frequently. Channels should be protected from erosion and berms maintained at design height so diversions have adequate capacity.

2. Fences should be installed and maintained around the lagoon, including the entire dam, to exclude unauthorized access by people or livestock.

3. Maintain a good vegetative cover of recommended grasses on earth berms and embankments. If the vegetative cover is damaged it should be reestablished as soon as possible.

4. Mow the vegetation at least once a year to control noxious weeds and encourage vigorous growth. Prevent grass and weed clippings from falling into the lagoon.

5. Check frequently for burrowing animals around structures and in the berms and embankments. Remove them and repair any damage caused by their activity.

6. Check the settling tank at least twice a year. When the tank is filled with solids, it must be pumped out and the contents spread in accordance with the management plan.

7. Check earth berms and embankments twice a year and determine they are not sloughing, eroding or settling. Maintain top height.

8. Inspect haul roads and approaches to and from the lagoon frequently to determine the need for stone, gravel or other stabilizing material.

9. There must be no outflow from the lagoon except into a properly designed treatment area. Do not allow outflow or spills to flow into streams or road ditches.

10. Inspect and repair/replace all warning and hazard signs as needed.

11. Outlets of foundation and subsurface drains should be checked frequently and kept open. The outflow from these drains should be checked when the lagoon is being used to determine if there is leakage from into the drains. Leakage may be detected by the color and smell of the outflowing liquid, by lush dark green growth of vegetation around the outlet, by the growth of algae in the surface ditch or by the vegetation being killed by the outflowing liquid. If leakage is detected, repairs should be planned and made to prevent the possible contamination of surface or groundwater.

Safety

1. All waste treatment lagoons must be posted with signs with the following or a similar warning:

DANGER - KEEP OUT

THIS IS A WASTE STORAGE POND AND PROLONGED
EXPOSURE MAY BE HAZARDOUS TO YOUR HEALTH.

Future Wells

When installing new wells, springs or other potable water sources, due consideration must be given to the distance, grade and location of the lagoon to the new water source. The Department of Health, Department of Agriculture and/or Natural Resources Conservation Service should be consulted as to installing new potable water supplies in relation to the treatment lagoon.

Specific Requirements for Your Practice